What is claimed is:

1. A method of printing, comprising:

receiving print data defining an arrangement of a first set of image elements within an array of first and second sets of image elements, the first set having a different color characteristic than the second set;

selecting at least one mode for placement of colorant-based representations of the image elements of the first set onto a print medium based on one or more values corresponding to the percentage of image elements of the first set in at least one of the array and one or more portions of the array; and

placing the colorant-based representations onto the print medium according to the at least one mode selected and in the arrangement defined by the print data.

2. The method of claim 1, wherein receiving print data includes receiving print data defining at least a portion of one or more of text, graphics, and photographs.

3. The method of claim 1, wherein selecting at least one mode includes selecting at least one of a direction, a rate, and an order of placing the colorant-based representations of the first set of image elements.

4. The method of claim 1, wherein receiving includes receiving print data defining an arrangement of a first set of image elements having a color characteristic that is non-white in an array of the first set and a second set of image elements having a color characteristic that is white.

5. The method of claim 1, wherein receiving includes receiving print data defining a first set of contone image elements, and wherein placing includes placing one or more colorant-based halftone representations of each contone image element.

6. A method of printing, comprising:

receiving print data defining an arrangement of a first set of contone image elements within an array of first and second sets of contone image elements, the first set having a different color characteristic than the second set;

selecting an order for placing colorant-based representations of the first set of contone image elements onto a print medium based on one or more values corresponding to the percentage of contone image elements of the first set in at least one of the array and one or more portions of the array; and

placing the colorant-based representations onto the print medium according to the order selected and in the arrangement.

7. The method of claim 6, wherein receiving print data includes receiving print data defining at least a portion of one or more of text, graphics, and photographs.

8. The method of claim 6, wherein receiving includes receiving print data defining an arrangement of a first set of contone image elements having a color characteristic that is non-white in an array of the first set and a second set of contone image elements having a color characteristic that is white.

9. The method of claim 6, wherein selecting an order includes selecting at least one direction for travel of one or more printheads during placing.

10. The method of claim 6, wherein the array includes rows, the method further comprising determining the one or more values based on the number of contone image elements of the first set in one or more of the rows.

11. A method of printing, comprising:

receiving print data defining an arrangement of a first set of image elements in an array of first and second sets of image elements, the first set having a different color characteristic than the second set;

determining one or more values corresponding to the percentage of image elements of the first set in at least one of the array and one or more portions of the array;

selecting a direction for each of a plurality of passes of one or more printheads in relation to a print medium based on the one or more values; and

delivering at least one colorant to the print medium during each of the plurality of passes and in the direction selected for each pass to create colorant-based representations of the image elements of the first set disposed in the arrangement.

12. The method of claim 11, wherein receiving including receiving a first set of image elements having a color characteristic that is non-white and a second set of image elements having a color characteristic that is white.

13. The method of claim 12, wherein the plurality of passes includes a sequential pair of passes configured to deliver the at least one colorant as adjacent swaths to the print medium, and wherein selecting includes selecting one of an equivalent direction and opposing directions for the sequential pair of the passes.

14. The method of claim 13, wherein the array includes rows, the one or more values being row values corresponding to the percentage image elements of the first set in each of the rows, and wherein the equivalent direction is selected if one or more of the row values are greater than a predefined threshold within a predefined number of the rows, the opposing directions being selected if one or more of the row values is less than the predefined threshold within the predefined number of the rows.

15. A printing system, comprising:

a data manipulation portion configured (1) to receive print data defining an arrangement of a first set of image elements in an array of first and second sets of image elements, the first set having a different color characteristic than the second set, (2) to determine one or more values corresponding to the percentage of image elements of the first set in at least one of the array and one or more portions of the array, and (3) to select a direction for each of a plurality of passes in relation to a print medium based on the one or more values; and

a colorant placement portion in communication with the data manipulation portion and including one or more printheads configured to deliver at least one colorant to the print medium as the printheads perform each of the plurality of passes in the direction selected for each pass to create colorant-based representations of the image elements of the first set disposed in the arrangement.

16. The printing system of claim 15, wherein the data manipulation portion and the colorant placement portion are integrated in a single printing apparatus.

17. The printing system of claim 15, wherein the colorant placement portion is configured to deliver the at least colorant in a plurality of modes including a uni-directional mode and a bi-directional mode.

18. The printing system of claim 15, wherein the colorant placement portion is configured to fire droplets of the at least one colorant toward the print medium.

19. A program storage device readable by a processor, tangibly embodying a program of instructions executable by the processor to perform a method of producing output, the method comprising:

receiving print data defining an arrangement of a first set of image elements within an array of first and second sets of image elements, the image elements of the first set having a different color characteristic than the image elements of the second set;

selecting one or more modes for placement of representations of the image elements of the first set relative to a print medium based on one or more values corresponding to the percentage of image elements of the first set in at least one of the array and one or more portions of the array; and

placing the representations of the image elements of the first set relative to the print medium according to the one or more modes selected and in the arrangement defined by the print data.

20. A printing system, comprising:

means for receiving print data defining an arrangement of a first set of image elements within an array of first and second sets of image elements, the first set having a different color characteristic than the second set;

means for selecting at least one mode for placement of colorant-based representations of the image elements of the first set onto a print medium based on one or more values corresponding to the percentage of image elements of the first set in at least one of the array and one or more portions of the array; and

means for placing the colorant-based representations onto the print medium according to the at least one mode selected and in the arrangement defined by the print data.

21. A method to improve the print speed of a printer having uni-directional and bi-directional print modes, comprising:

receiving print data defining non-white pixels and white pixels;

determining one or more values corresponding to the percentage of non-white pixels or white pixels included in one or more portions of the print data;

selecting one of the uni-directional print mode and the bi-directional print mode based on the one or more values; and

printing the print data with the one print mode selected.

22. The method of claim 21, wherein the print data defines a set of rows in which the non-white pixels and the white pixels are disposed, and wherein determining includes determining one or more values corresponding to the percentage of non-white pixels or white pixels in one or more rows of the set.

23. The method of claim 22, wherein determining includes determining values corresponding to the percentage of non-white pixels or white pixels in each row of a contiguous set of rows.

24. The method of claim 21, wherein selecting includes comparing the one or more values with a predefined threshold.

25. The method of claim 24, wherein the one or more values are a plurality of values from a set of rows defined by the print data, wherein selecting includes comparing each of the plurality of values with the predefined threshold, and wherein the uni-directional mode is selected unless each of the plurality of values has a predefined relation with the predefined threshold.

26. The method of claim 21, wherein selecting is performed so that text and vector-based images are printed at least substantially with the bi-directional mode and so that raster-based images of greater than a predefined size are printed at least substantially with the uni-directional mode.

27. The method of claim 21, wherein printing includes forming the non-white pixels by colorant placement and forming each of the white pixels without colorant placement.

28. The method of claim 21, wherein the white pixels correspond to null data elements in the print data.

29. The method of claim 21, wherein printing is performed by placement of one or more colorants onto a print medium defining a background, and wherein printing creates representations of the white pixels with the background without placement of the colorants.

30. The method of claim 29, wherein printing is performed by placement of the one or more colorants onto a non-white medium, and wherein printing creates non-white representations of the white pixels with the non-white medium.